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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,409	05/15/2006	Jozef Pieter Van Gassel	NL 031340	7907
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EXAMINER SUAREZ, FELIX E				
ART UNIT 2857		PAPER NUMBER		
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/579,409

**Applicant(s)**

VAN GASSEL, JOZEF PIETER

**Examiner**

FELIX E. SUAREZ

**Art Unit**

2857

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 September 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Withdrawal of the Objection to the Specification***

1. The indicated objection to the specification is withdrawn in view of the Applicant's express declination to add section headings; see remarks filed 05/22/2008.

***Withdrawal of Claim Rejections - 35 USC § 101***

2. The indicated 35 USC § 101 Rejection of claim 12 is withdrawn in view of the Applicant's amendment filed 05/22/2008.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Du et al. (U.S. Patent Application Publication No. 20030088326) in view of Yasuura et al. (U.S. Patent No. 6,606,532).

With respect to claims 1, and 11, Du et al. (hereafter Du) teaches; a battery powered device (or method) for playback of a media title from a memory

unit (see page 3 paragraph [0031] portable computer as an audio player; is a battery powered device to playback music, stored in a Hard Disk Drive HDD and see page 5 paragraph [0059] power load on the portable computer battery);

the device comprising means for determining available battery energy (see page 3 paragraph [0036] The mini-OS Operating System power saving software manages the usage of the CPU and the MP3 storage devices) and calculation means for calculating energy required for playback of the media title to the end in relation to the available battery energy (see page 3 paragraph [0038] lines 1-16, For example a 500 MHz Pentium III CPU has about 225 MIPS of processing power; and the decode algorithm requiring about 15MIPS, the CPU will be operating less than 10% of the power operating time),

the memory unit comprising a storage medium and reading means for reading at least a part of the media title from the storage medium (see page 3 paragraph [0032] lines 6-12 , RAM memory with approximately 120 Mbytes for use or 2 hours of compressed music),

the reading means being arranged for retrieving playback control information from the storage medium concerning the media title (see pages 7, 8, paragraphs [0079], [0080], after the compressed audio files are loaded into system memory at step 210, or if the audio file(s) are already in system memory, the audio files are then decompressed, at step 211, using the system CPU 26. DMA transfer(s) to the codec 42 are initialized for the decompressed audio data, at step 21, and then the output signal from the Codec 42 is amplified).

Du does not explicitly teach;  
the calculation means being arranged for calculating said required energy depending on the playback control information and an energy consumption model of the device, wherein the energy consumption model incorporates at least an average energy consumption of the memory unit and display unit per unit of time or file size.

But Yasuura et al. (hereafter Yasuura) teaches in a Large-Scale Integration (LSI) manufacturing system that, the overall energy consumption determining the battery life is related to the drive time of the LSI (see Yasuura; col. 13, lines 20-25).

Yasuura also teaches that, the performance, power consumption and energy consumption can be accurately estimated (see col. 13, lines 30-35).

Yasuura further teaches that, energy consumption as well as power consumption is used as indicator. The average power consumption is obtained by calculating the energy consumption per unit time (see Yasuura; col. 14, lines 52-60).

Yasuura teaches that, a program for a desk-top calculator, has an input/output and the calculations are carried out according the four rules of the arithmetic (see Yasuura; col. 14 line66 to col. 15 line 5).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Du to include a software program for a desk-top calculator as taught by Yasuura, because the software program for a

desk-top calculator of Yasuura allows to calculate the average power consumption obtained by calculating the energy consumption per unit time, as desired.

With respect to claim 2, Du in combination with Yasuura teaches all the features of the claimed invention, and Du further teaches that, warning means for providing a warning signal when not enough battery energy is available for playback of a media title to the end (see page 5 paragraph [0063], lines 1-14, The typical operating system supports six system power states, referred to as S0 (fully on and operational) through S5 (power off). Each state is characterized by power consumption; in other words, how much power is able before to reach the power off).

With respect to claim 3, Du in combination with Yasuura teaches all the features of the claimed invention, except that Du does not teach;

comprising interaction means for offering a user options for choosing an action to perform in relation to the required energy and available energy, such as playing back in a lower resolution or playing back a shorter version of the media title.

But Yasuura teaches that, a selector 80 is provided for selecting and computing any one of the carries Cn of each bit (see Yasuura; col. 10, lines 1-9).

Yasuura also teaches that, an explanation is given of the process for determining the un-required part of the chip. A given application program A1 is analyze to determine the number of bits of each variable in the program. Then, the data-path width of the core processor is changed, the program A1 is compiled for each data-path width, and the performance and the power consumption are estimated. From the result of estimation, the data-path width D1 of the core processor minimizing the power consumption within an acceptable performance is calculated (see Yasuura; col. 12, lines 3-14).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Du to include a carry selector as taught by Yasuura, because the carry selector of Yasuura allows to a user to select a data-path width to estimate the performance and power consumption with an acceptable performance calculated, as desired.

With respect to claim 4, Du in combination with Yasuura teaches all the features of the claimed invention; and Du further teaches that; the playback information for generating a shorter version of the media title is retrieved from the storage medium, auto generated before or during playback, or edited by a user (see page 3 paragraph [0032], lines 14-19, when flash media is used for MP3 storage; and see page 3 paragraph [0036], a small LCD display provide a visual status indicators under control of the mini-OS display management subroutines, all of the contents can be copied to the system RAM, thus minimizing the access

of the flash media reader and allowing for a more responsive control over the MP3 files).

With respect to claims 5 and 9, Du in combination with Yasuura teaches all the features of the claimed invention; and Du further teaches that, the reading means is arranged for retrieving the file size (or playing time) of the media title (see page 3 paragraph [0033], lines 13-20, the decoded signal is converted from digital to analog. Then the output signal from code (8) is amplified (10) (also see FIG. (44) to drive the speakers and or headset (see FIG. 3 (46)). and the calculation means is arranged for calculating the required energy depending on the file size (or playing time) of the media title (see page 3 paragraph [0038], lines 10-16, calculation of power operating time for 30 songs).

With respect to claims 6 and 8, Du in combination with Yasuura teaches all the features of the claimed invention; except that Du does not teach;

comprising a buffer for holding the part of the media title, and a playback unit for consuming the part of the media title from the buffer, wherein the calculation means is arranged for calculating the required energy depending on the number of times the reading means have to fill the buffer for playback of the media title to the end.

But Yasuura teaches that, a foregoing description represents the case in which power supply to the register file 21 is cut off. As an alternative, the clock signal supplied to each FF30 of the register file 21 can be cut off to reduce the



power consumption. As shown, the clock signal input to the FF 30 of each register is supplied from one of the clock buffers 74-0 to 74-m collectively in bits (see Yasuura; col. 9, lines 36-36).

Yasuura also teaches that, the performance, power consumption and energy consumption can be accurately estimated (see col. 13, lines 30-35).

Yasuura further teaches that, energy consumption as well as power consumption is used as indicator. The average power consumption is obtained by calculating the energy consumption per unit time (see Yasuura; col. 14, lines 52-60).

Yasuura teaches that, a program for a desk-top calculator, has an input/output and the calculations are carried out according the four rules of the arithmetic (see Yasuura; col. 14 line 66 to col. 15 line 5).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Du to include a clock buffers as taught by Yasuura, because the clock buffers of Yasuura allows to cut of the input to a register to reduce the power consumption and calculate the average power consumption obtained by calculating the energy consumption per unit time, as desired.

With respect to claim 10, Du in combination with Yasuura teaches all the features of the claimed invention; and Du further teaches that, the playback control information comprises characteristic point information and the calculation

means is arranged for calculating the required energy depending on the characteristic point information (see page 5 paragraph [0063], The typical operation system supports six system power states; each state is characterized by power consumption i.e., how much power the computer uses and software resumption, i.e., from what point the operating system restarts).

With respect to claim 12, Du in combination with Yasuura teaches all the features of the claimed invention; and Du teaches a computer program product comprising a computer usable medium having a computer readable program when executed on a computer causes the computer perform the method as claimed in claim 11 (see page 2 paragraph [0026] a computer system includes a mini-OS (operation System) software and hardware).

### ***Response to Arguments***

4. Applicant's arguments with respect to the claims have been fully considered but they are moot in view of the new ground(s) of rejection set forth hereinbefore.

Regarding section headings, applicant is required to add section headings (see above); the Specification without section headings has no clear distinction between the background and the disclosure of the invention.

***Prior Art***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Nonaka [U.S. Patent No. 6,507,195] describes a battery-driven apparatus, for checking batteries.

Murphy [U.S. Patent No. 6,236,326] describes a battery pack capable of powering an electronic unit.

Higuchi et al. [U.S. Patent No. 6,522,361] describes information specifying a state of a battery pack.

***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Felix Suarez, whose telephone number is (571) 272-2223. The examiner can normally be reached on weekdays from 8:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eliseo Ramos-Feliciano can be reached on (571) 272-7925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300 for regular communications and for After Final communications.

August 28, 2008

/Felix E Suarez/  
Examiner, Art Unit 2857

/Eliseo Ramos-Feliciano/  
Supervisory Patent Examiner, Art Unit 2857